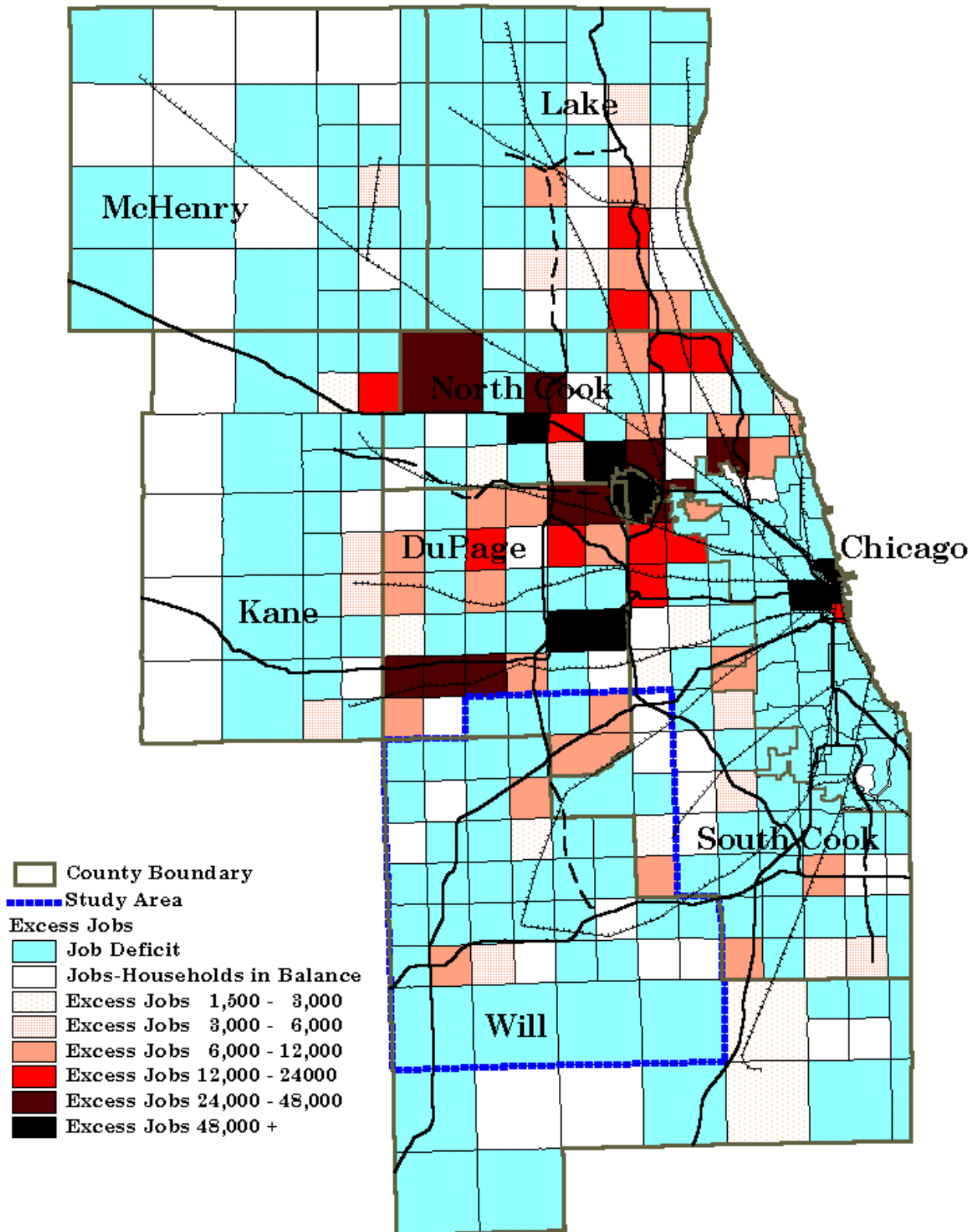
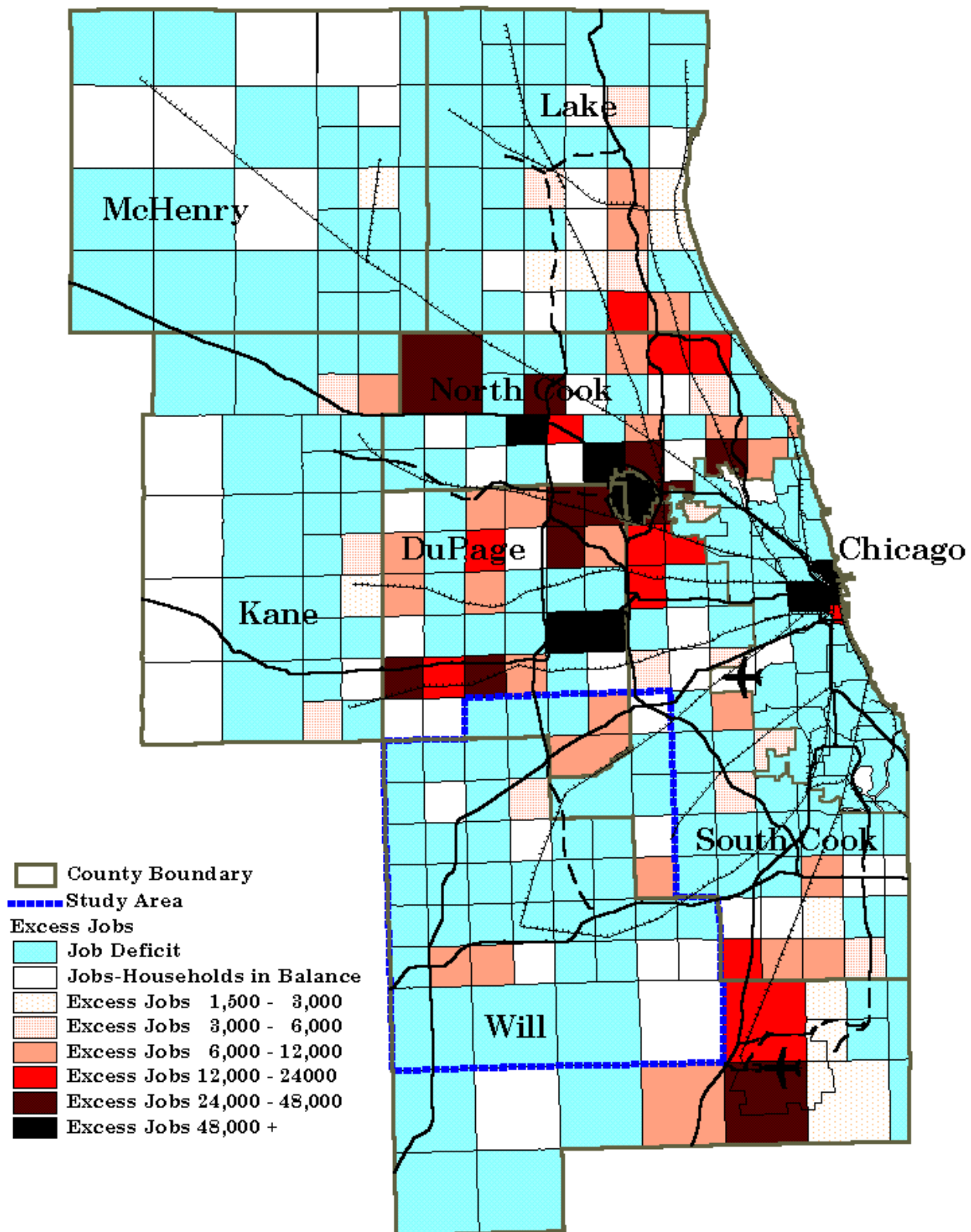


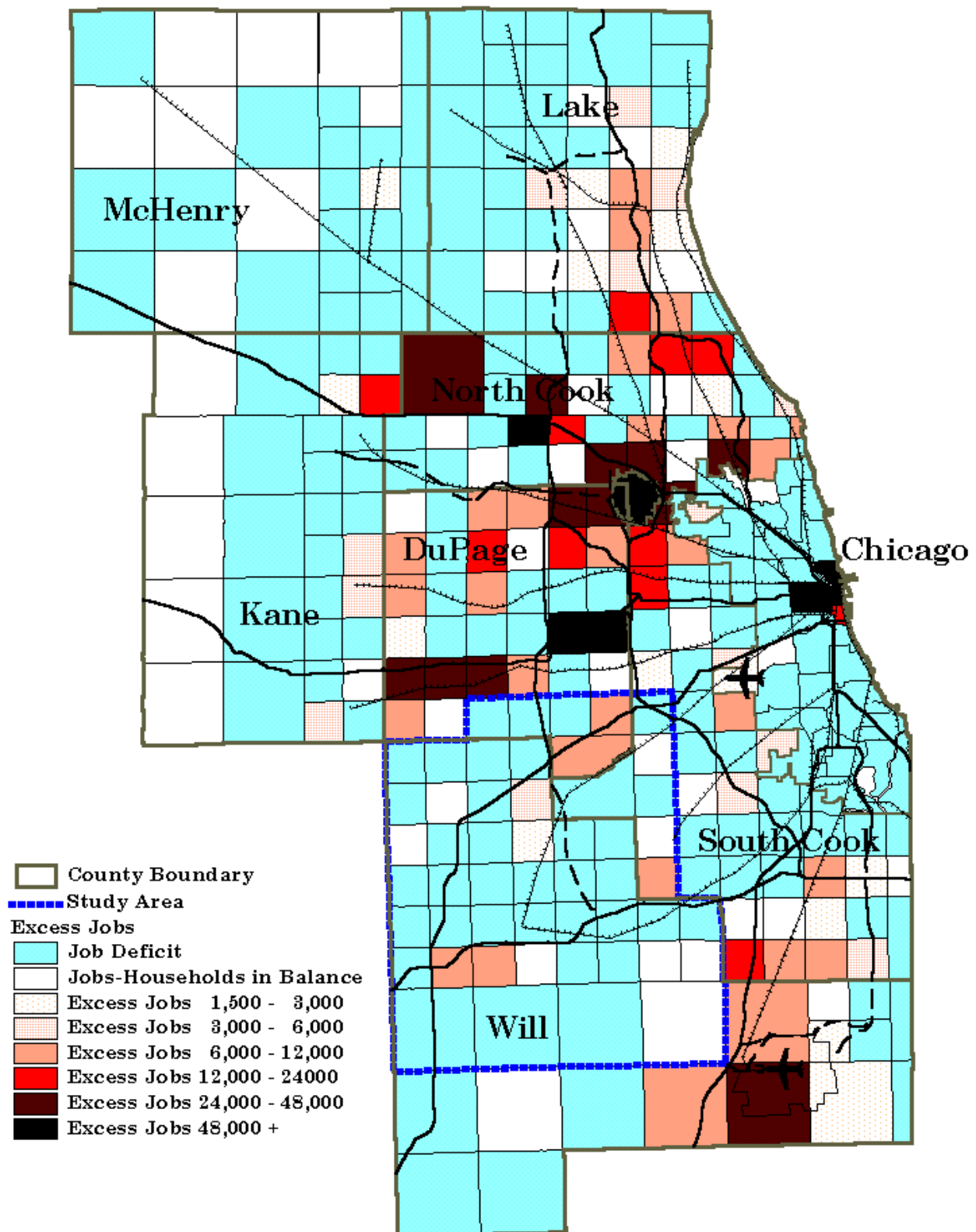
# Exhibit 27 : Job/Household Balance - 2020 No-RTP Projects - Existing Airports Scenario



**Exhibit 28 : Job/Household Balance - 2020  
All RTP Projects - S. Suburban Airport Scenario**



# Exhibit 29 : Job/Household Balance - 2020 No-RTP Projects - S. Suburban Airport Scenario



### **III. Supplemental Analysis: An Analysis of CATS Trip Generation and Distribution and the Impact of I-355 on Access to Jobs**

#### **A. Introduction and Background**

The original and major intent of the socio-economic forecasts was to provide input to the various transportation alternatives serving the Study Area which were to be analyzed. As a first step in this analysis, the Chicago Area Transportation Study (CATS) was to provide trip generation and distribution outputs.

At the conclusion of the Supplemental Study, described in the prior section, CATS was asked to provide additional output to assist in analyzing the impact of the I-355 Extension on providing access to the region's major job concentrations. Consequently, in addition to their standard analysis, CATS also provided the following output:

- Total auto trips in the trip interchange during the am peak
- Auto mode work trips at am peak
- Congested auto travel time, in minutes, from the am peak

ACG then analyzed this output in tandem with the results of the socio-economic forecast and the supplemental analysis of job/household balance and the impact of transportation on the urban form of the Chicago six-county region.

#### **B. Methodology**

ACG examined travel times from selected zones within the Study Area to the remainder of the region. ACG prepared tables of these travel times and mapped them (or ratios) for the above-selected zones. Significant improvements were shown in travel time from the Study Area to the job-rich area of DuPage County.

#### **C. Major Findings in Work Trip End Changes**

Construction of the I-355 Extension has been criticized as contributing to urban sprawl. Opponents assume that if the I-355 Extension were not built more residents of the Study Area (primarily those in the Will County portion) would travel to work in the Chicago Central Area or in areas closer to the built-up portions of the region.

The results of the CATS model indicate that the exact apposite is true. The I-355 Extension does, indeed, provide easy and timely access to the job concentrations

of DuPage County. Without the I-355 Extension, residents of the Study Area would tend to travel to work outside the currently-developed portion of the Six-County region - into Kendall and Grundy Counties, in Illinois; and, to a lesser extent, to the near northwestern portion of Lake County, Indiana and southeastern Kane County. Because Kankakee County is not part of the CATS model, trip leakage into this area is not calculated.

The model also indicates that with the I-355 Extension, there would be a reduction of numerous, scattered work trips from the Study Area into the job-scarce sections of Southern Cook County and the South Side of Chicago. This result also has a beneficial impact on these areas in that it reduces competition for these jobs and increases the likelihood that residents of this areas will hold these jobs, reducing their work trip times and distance.

The result of the CATS model indicate that the overwhelming portion of the impacts of the I-355 Extension are on workers using autos rather than or rail commuters. Commuter train trips to the Chicago Central Area are not affected by the proposed Extension. Residents of the Study Area would find rail access no more or less convenient by the extension of I-355. The I-355 Extension does tend to concentrate trips to two key points: southern and central DuPage County and the intersection of I-355 Extension and I-80. In this respect, the I-355 Extension does precisely what it is meant to do; it concentrates and delivers workers to the job-rich area of DuPage and the developing center of Will County.

This study analyzed the differences among the three alternatives in delivering workers within a Three Township wide corridor of the I-355 Extension to the job-rich areas near them. For the Three-Township Corridor, the Full-Build increases work trips to DuPage by 37 percent over the No-Build. In contrast, the Arterial Alternative increases these work trips by 4 percent, and the Lemont By Pass increases them by 27 percent.

## **D. Comparative Detailed Impacts of Three Transportation Alternatives**

The previous section described the impact on work trip ends of the entire Study Area and the Three-Township Corridor of building versus not building the I-355 Extension. The shift was from more-distant, scattered locations to a greater concentration into the employment centers of DuPage County. This section looks at the three transportation alternatives in greater detail; those alternatives are:

- EA Full Build (I-355 Extension)
- Arterial Enhancements
- Lemont By-Pass

The following exhibits, 30-38, show changes in travel time from three zones - Zone 1548, Zone 1523, Zone 1594 - under these three transportation alternatives.

## **1. Changes in Zone 1548**

Exhibit 30 shows the changes in travel times to work due to construction of the I-355 Extension for Zone 1548, which is near the intersection of I-80 and I-355. The major improvements (of 25 percent or more) extend throughout most of DuPage County; and improvements of 12.5 to 25 percent extend all the way north to the Wisconsin border and east to the near west side of the City of Chicago. These access improvements encompass all of the job-rich areas of DuPage, Northwest Cook and Lake Counties; the latter are products of the expanding O'Hare job center.

Changes in travel times, due to the arterial enhancements, are shown on Exhibit 31. They are limited to the 12.5 to 25 percent range, only, and extend only to the lower south-east sector of DuPage and the area around the I-55 corridor.

The Lemont By-Pass impacts are shown on Exhibit 32. They extend into the same general areas as the I-355 Extension. However, the 25 percent or greater improvement zones are considerably fewer; and the 12.5 to 25 percent improvement penetration eastward is not as great. However, large sections of the region's most-concentrated job center are better-accessed.

## **2. Changes in Zone 1523**

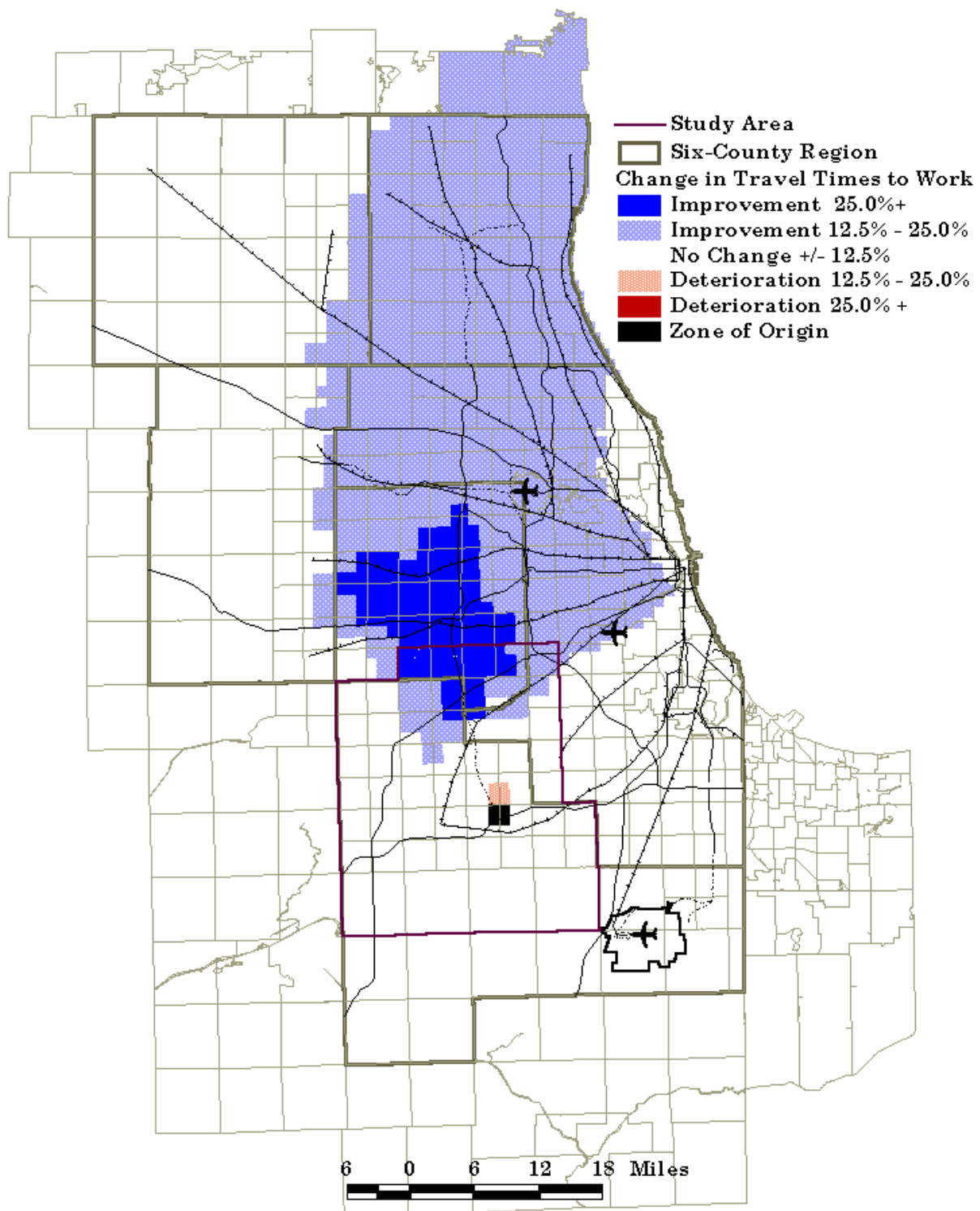
Zone 1523 is located at an eastern corner of Will County, with two sides bordering Cook County. The I-355 Extension improves travel times greatly, from this zone, into DuPage County, with 25 percent or greater savings. Savings of 12.5 to 25 percent extend northward into Northwest Cook and Lake Counties, Illinois. These are shown on Exhibit 33.

Arterial enhancements, shown on Exhibit 34, provide few improvements. Zones in only four townships, north and south of I-55 at the border of Will and DuPage Counties, see improvements.

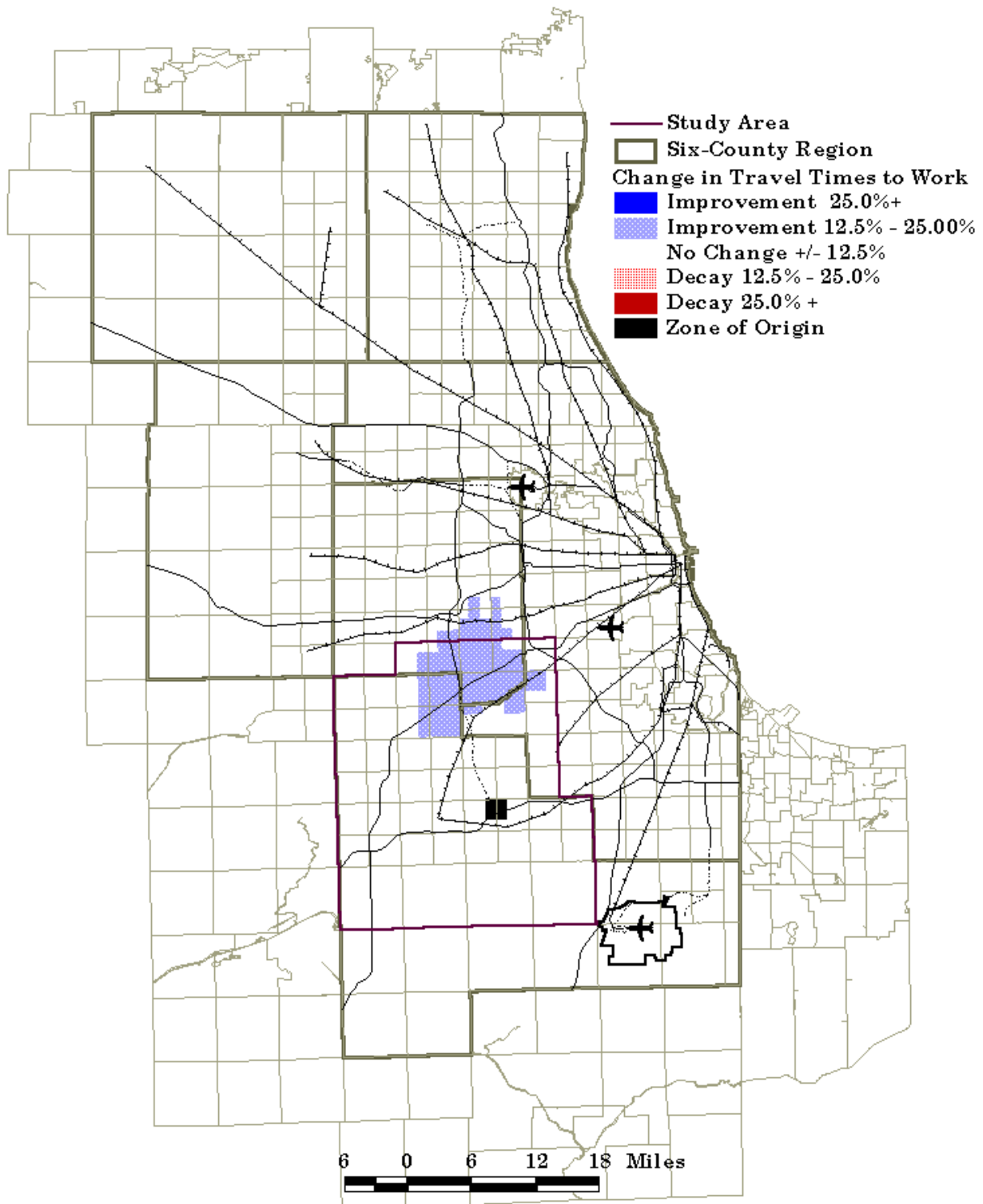
Exhibit 35 shows the impacts of the Lemont By-Pass on Zone 1523. Improvements of over 25 percent are few and extend only into the southern-most tier of Townships in DuPage County. Improvements of 12.5 to 25 percent do extend into the remainder of DuPage.



## Exhibit 30 : Changes in Travel Times to Work Full-Build Versus No-Build Scenarios - Zone 1548

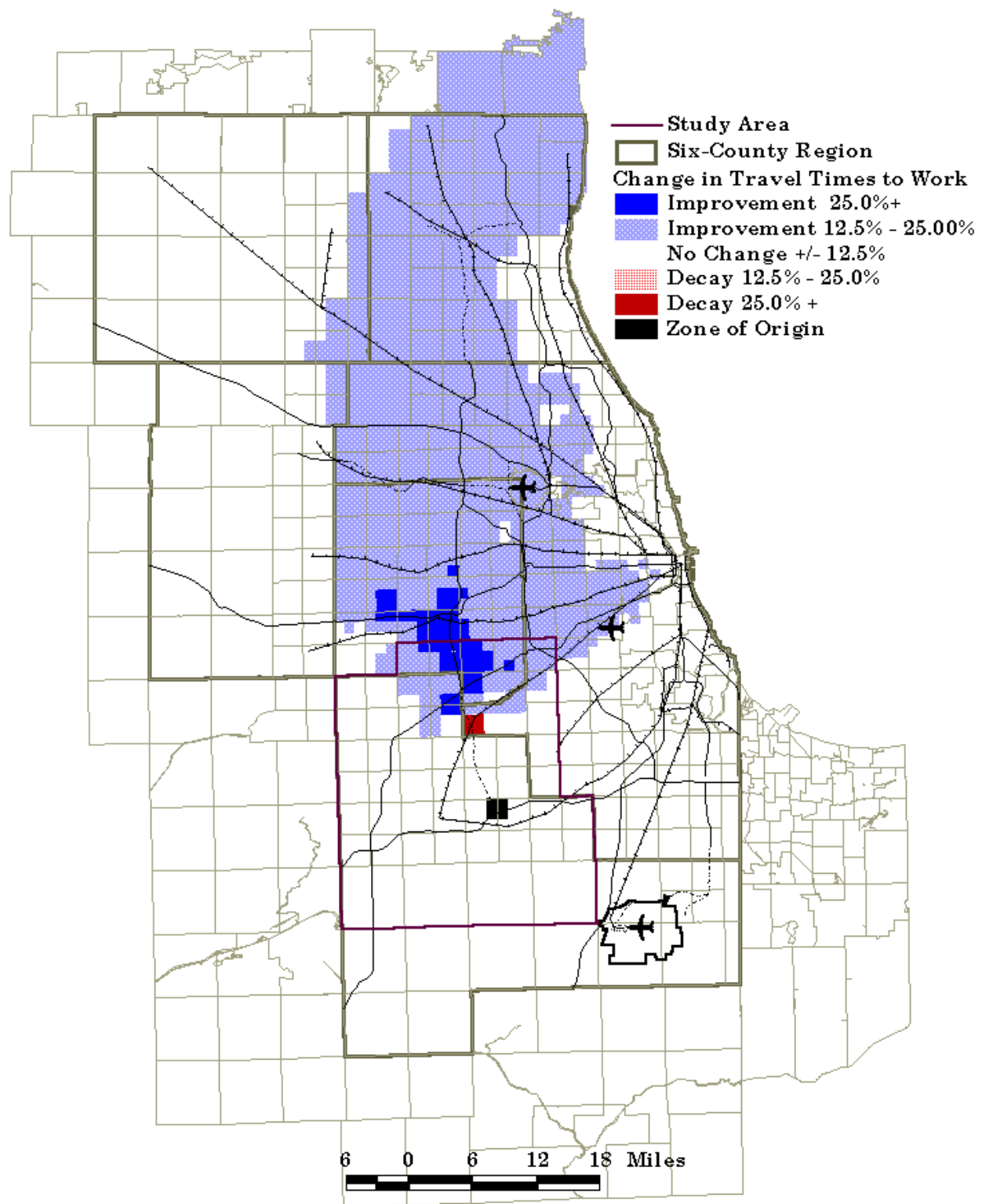


## Exhibit 31 : Changes in Travel Times to Work Arterial Enhancements Versus No-Build - Zone 1548

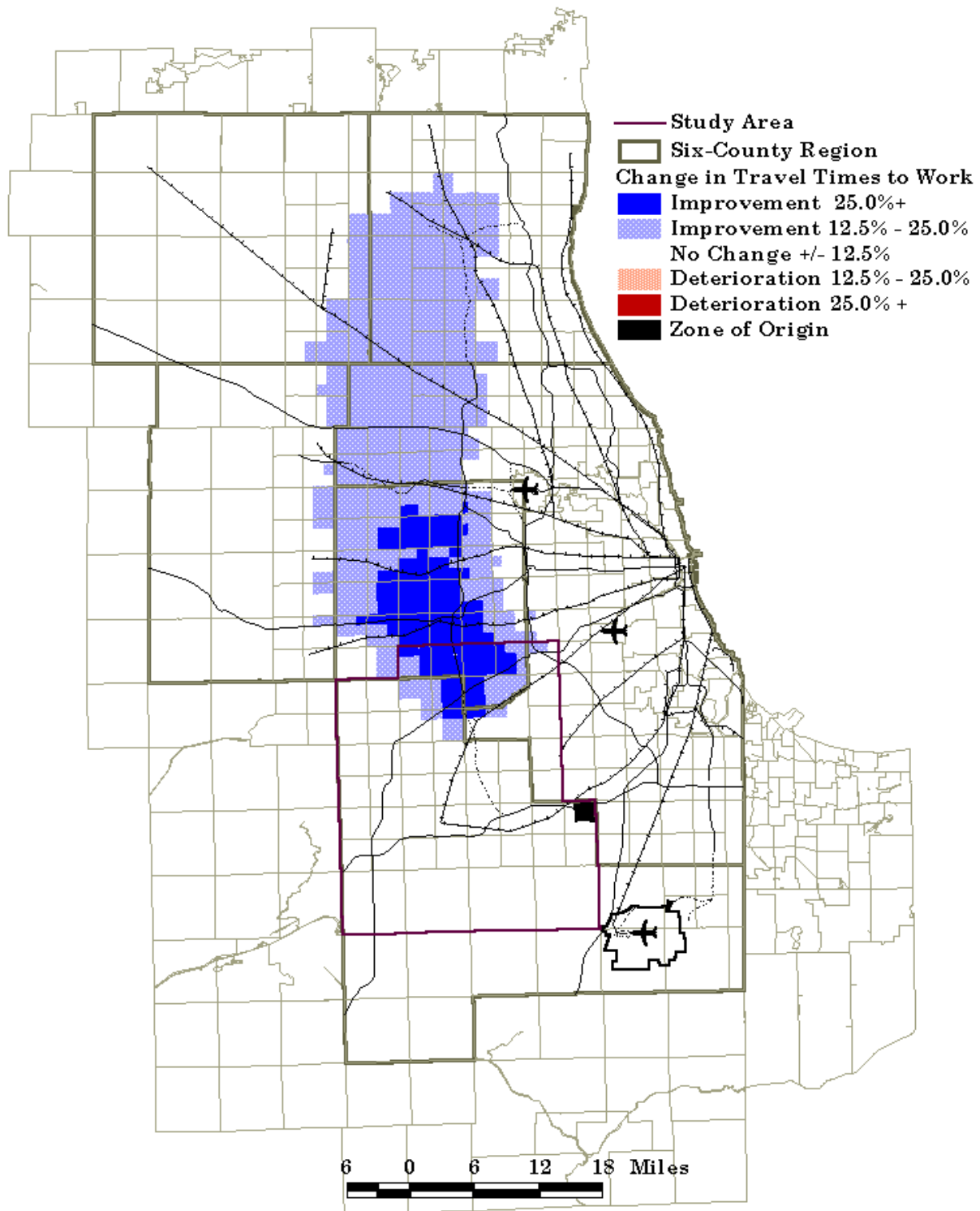




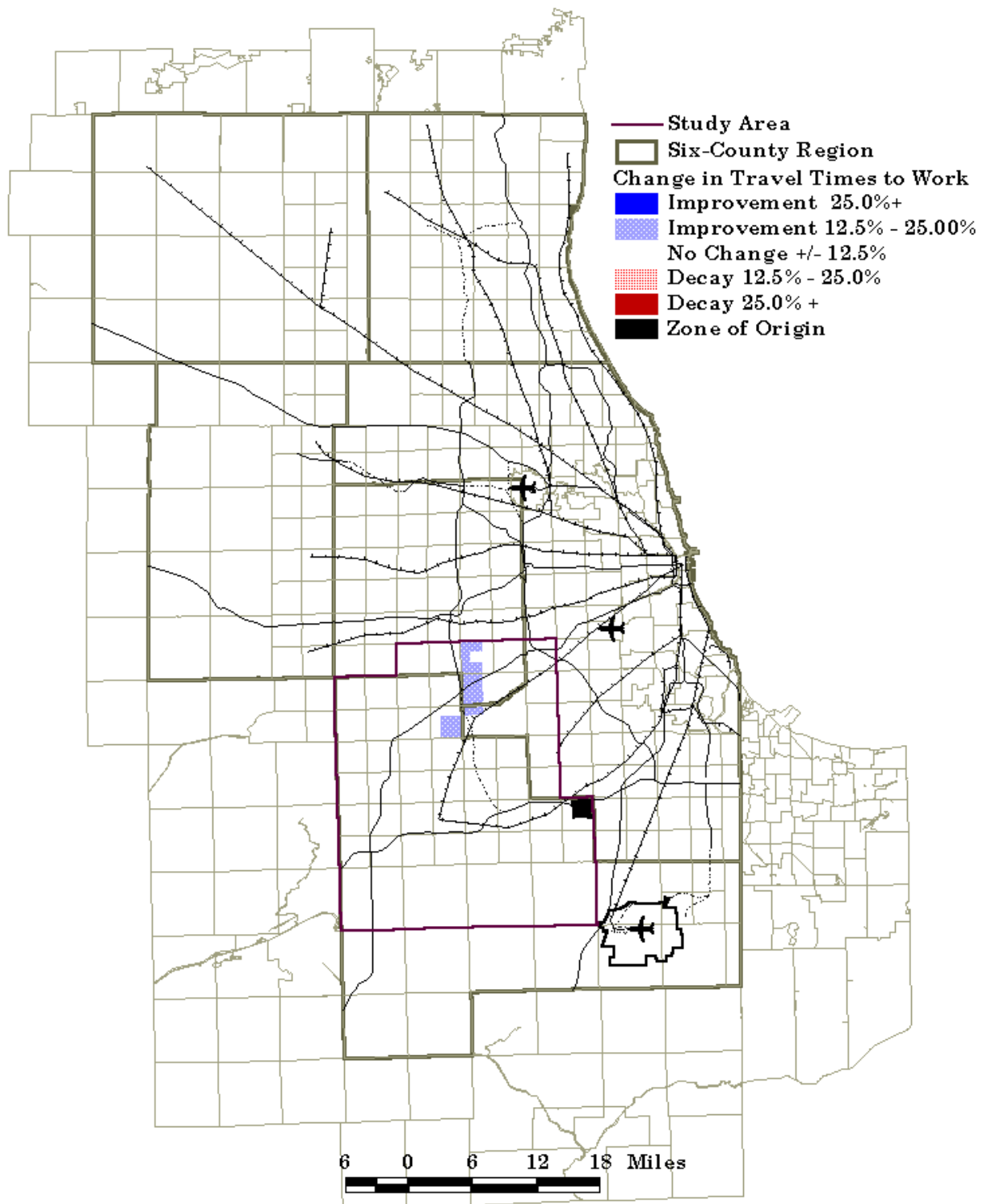
## Exhibit 32 : Changes in Travel Times to Work Lemont By Pass Versus No-Build - Zone 1548



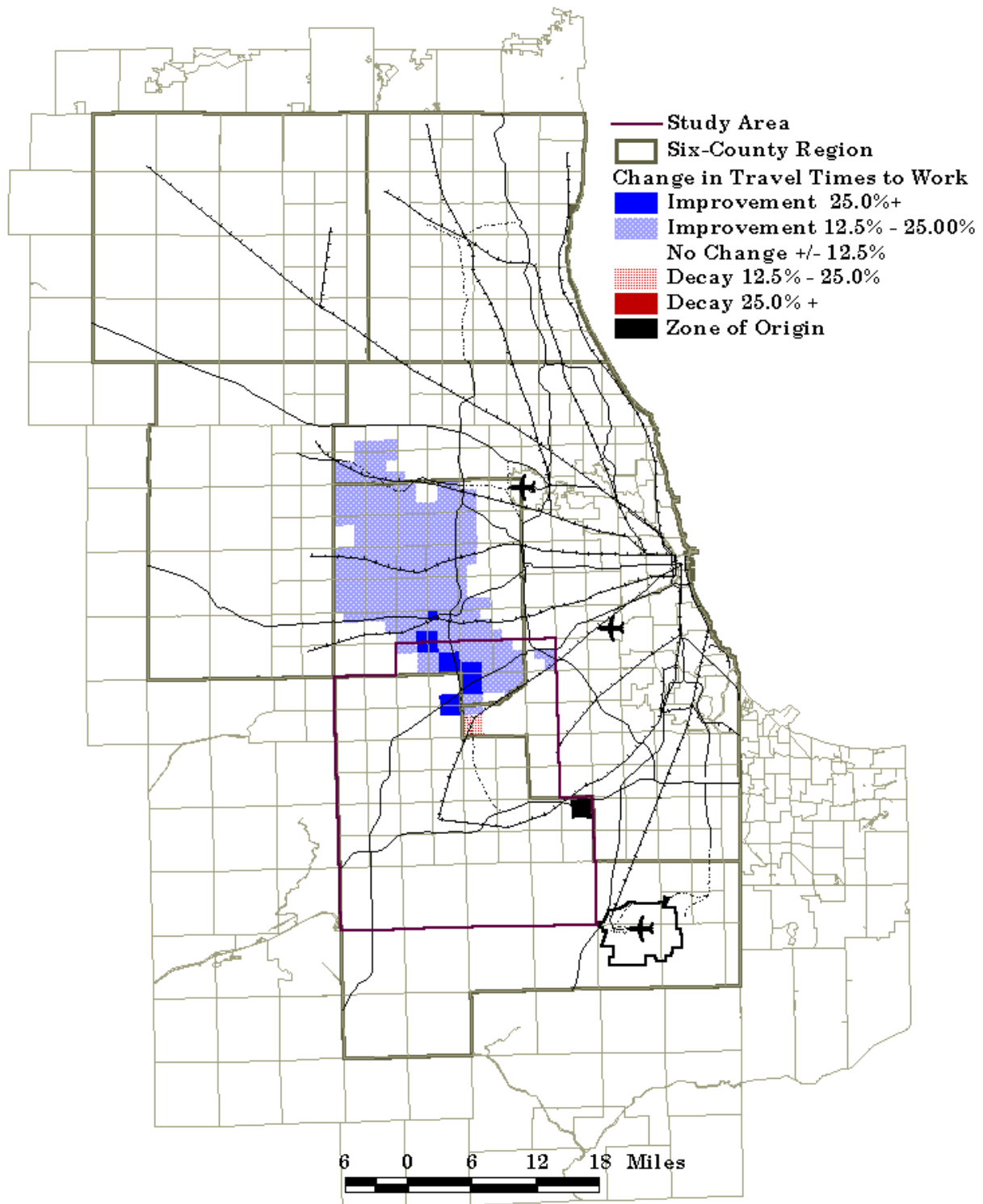
## Exhibit 33 : Changes in Travel Times to Work Full-Build Versus No-Build Scenarios - Zone 1523



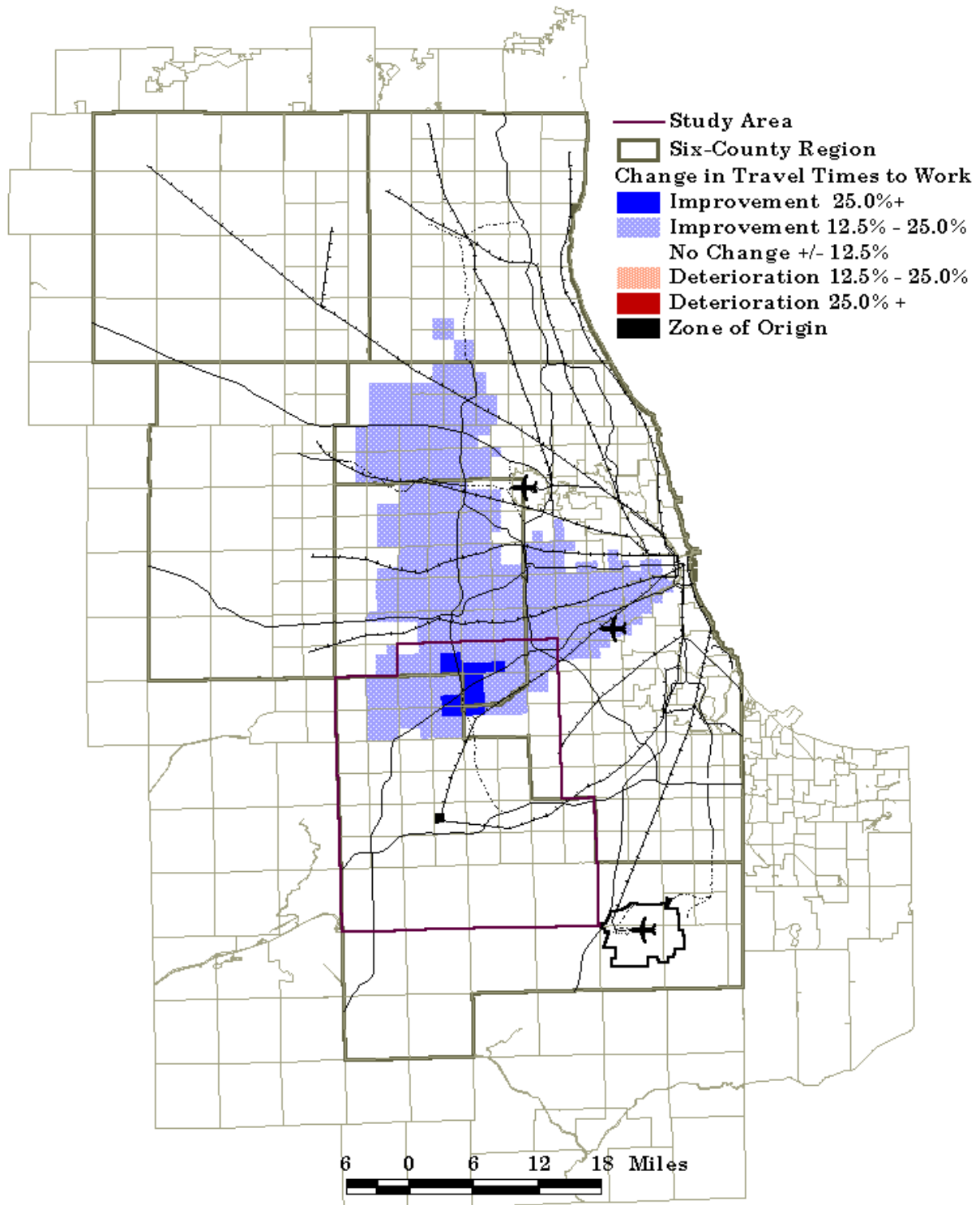
## Exhibit 34 : Changes in Travel Times to Work Arterial Enhancements Versus No-Build - Zone 1523



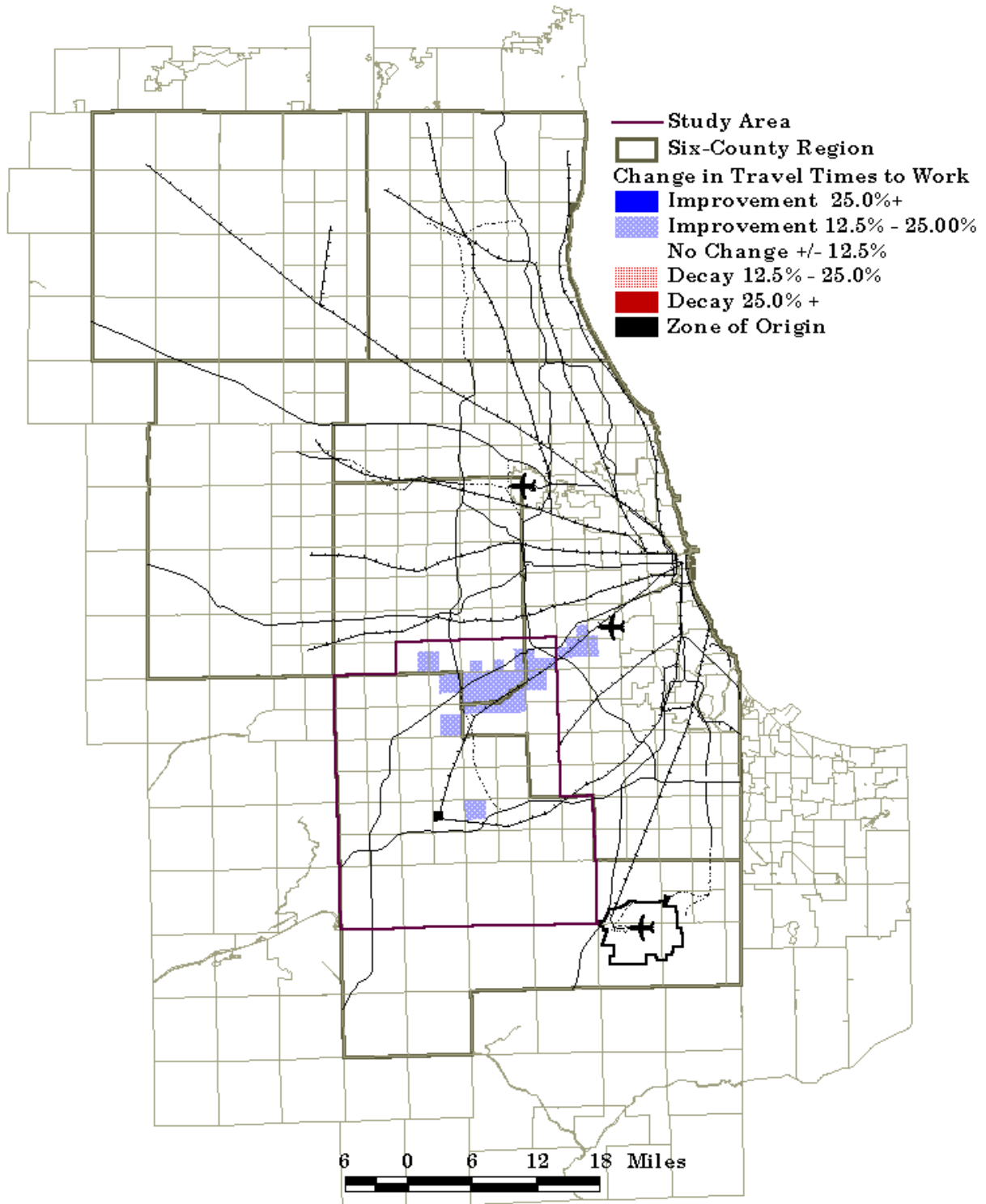
## Exhibit 35 : Changes in Travel Times to Work Lemont By Pass Versus No-Build - Zone 1523



## Exhibit 36 : Changes in Travel Times to Work Full-Build Versus No-Build Scenarios - Zone 1594

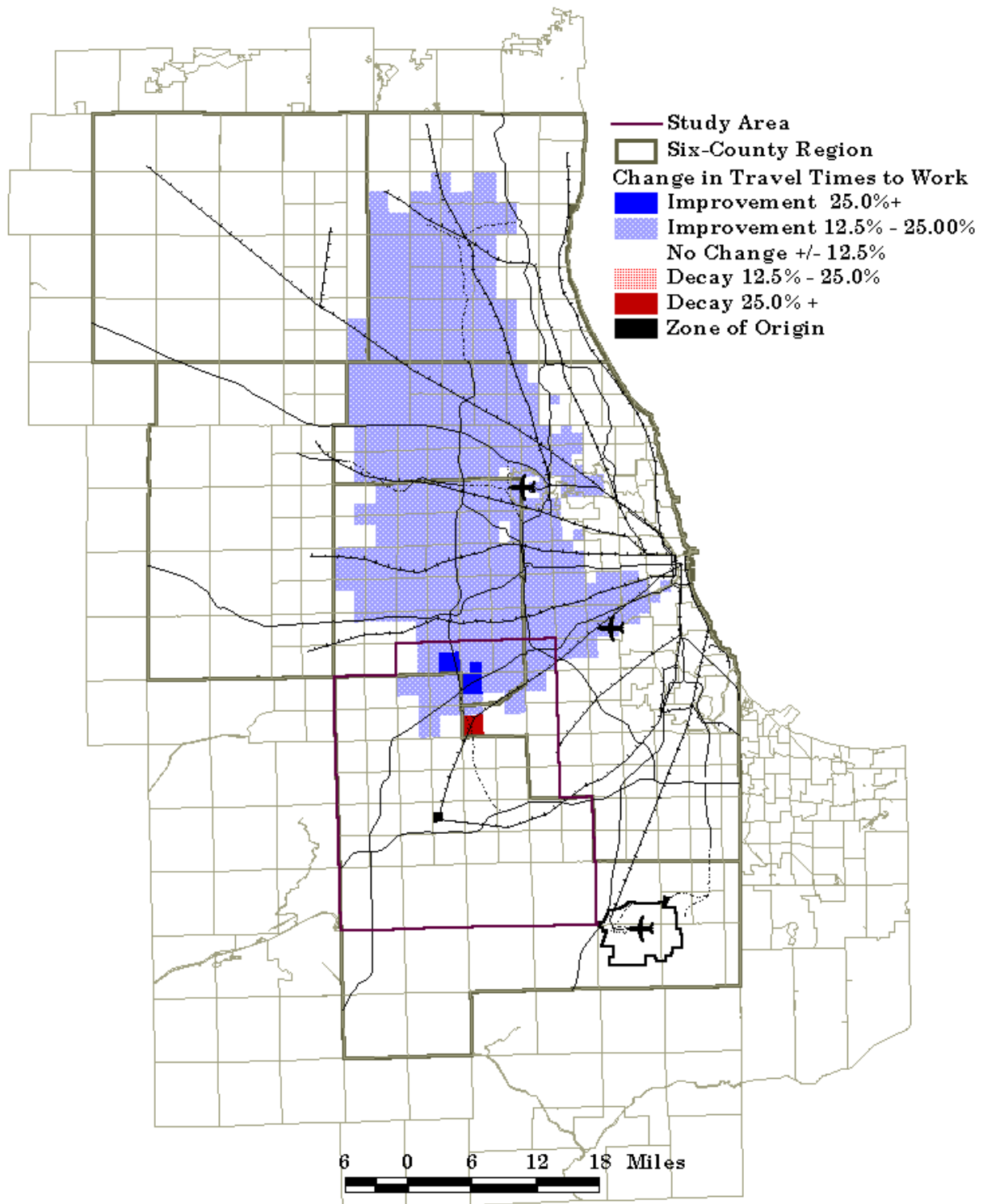


## Exhibit 37 : Changes in Travel Times to Work Arterial Enhancements Versus No-Build - Zone 1594





## Exhibit 38 : Changes in Travel Times to Work Lemont By Pass Versus No-Build - Zone 1594



### **3. Changes in Zone 1594**

Zone 1594 is located in the City of Joliet. Exhibit 36 shows the changes in travel times due to the I-355 Extension. Improvements of 25 percent or more are few and are limited to the Southern portion of DuPage. However, the improvements of 12.5 to 25 percent extend throughout DuPage, into Northwest Cook and into the southernmost part of Lake County. There are also improvements, eastward, along I-55 and I-290/I-88. Again, these are among the region's highest job concentrations.

Exhibit 37 shows the changes due to arterial enhancements. These improvements are limited to a few paralleling I-55. Only travel to the southern-most tier of DuPage's townships is improved.

Changes from the Lemont By-Pass are shown on Exhibit 38. This is one instance where travel time improvements are better for this alternative than for the I-355 Extension. Improvements of 12.5 to 25 percent extend throughout DuPage, Northwest Cook and much of Lake Counties. Improvements also extend to the area surrounding O'Hare.

## **E. Additional Zonal Comparisons**

At the request of HDR Engineering, Inc., ACG looked at impacts on several additional zones that are located on the current regional interstate system. These impacts, shown on Exhibits 39-45, are for:

- Zone 1548 - at the intersection of I-55 and I-355
- Zone 671 - at the intersection of I-55 and I-294
- Zone 1642 - at the intersection of I-55 and I-80

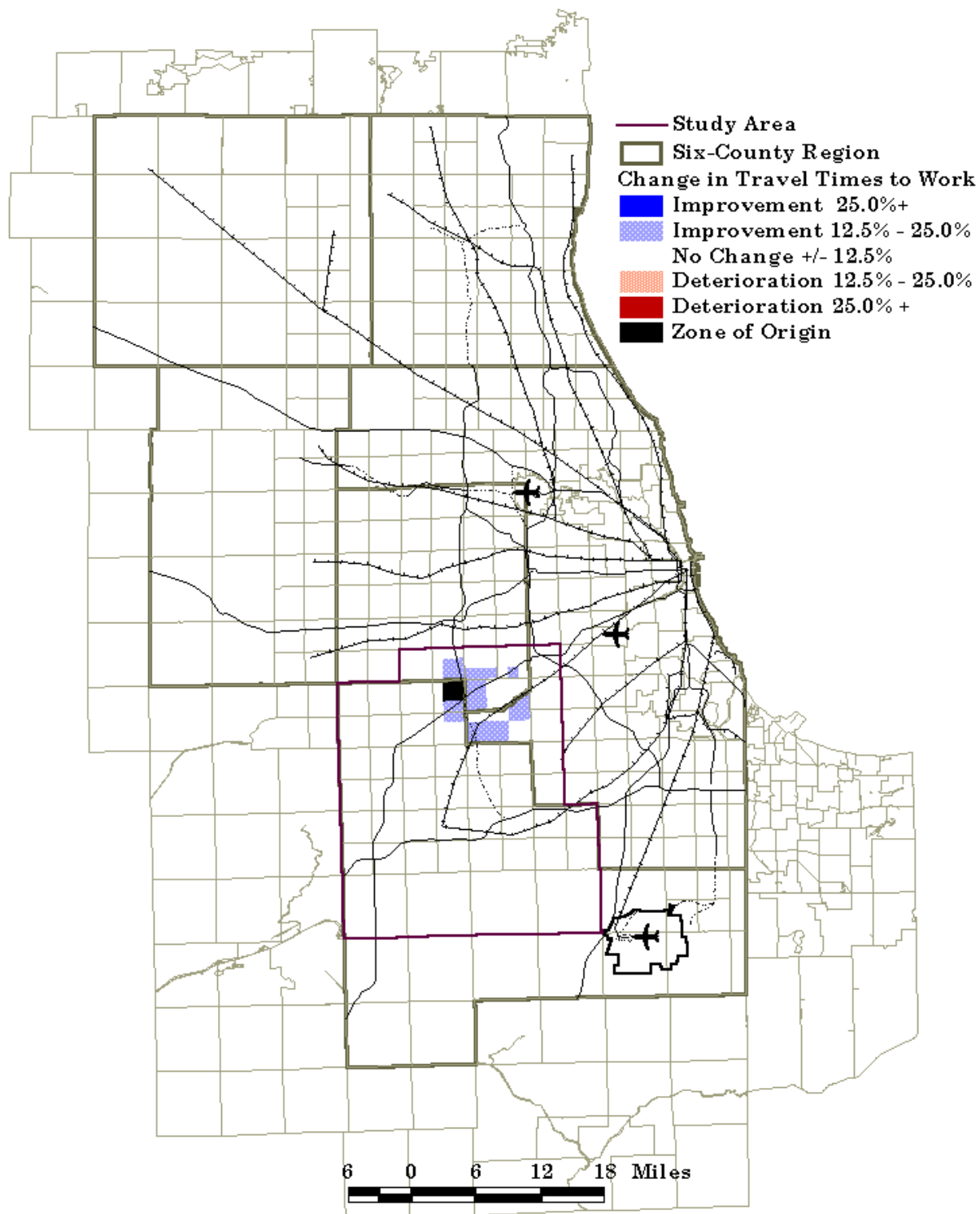
As expected, both the I-355 Extension and the Lemont By-Pass improve travel times, southward, for Zone 671; these impacts are shown on Exhibits 42 and 44, respectively. The I-355 Extension, in particular, has major time savings (25<sup>+</sup> percent) along its corridor.

All other impacts for all three zones are minor. It should be noted, that in all instances, shown on Exhibits 30-45, decay in travel times was limited to one zone, in the few times that decay occurred.

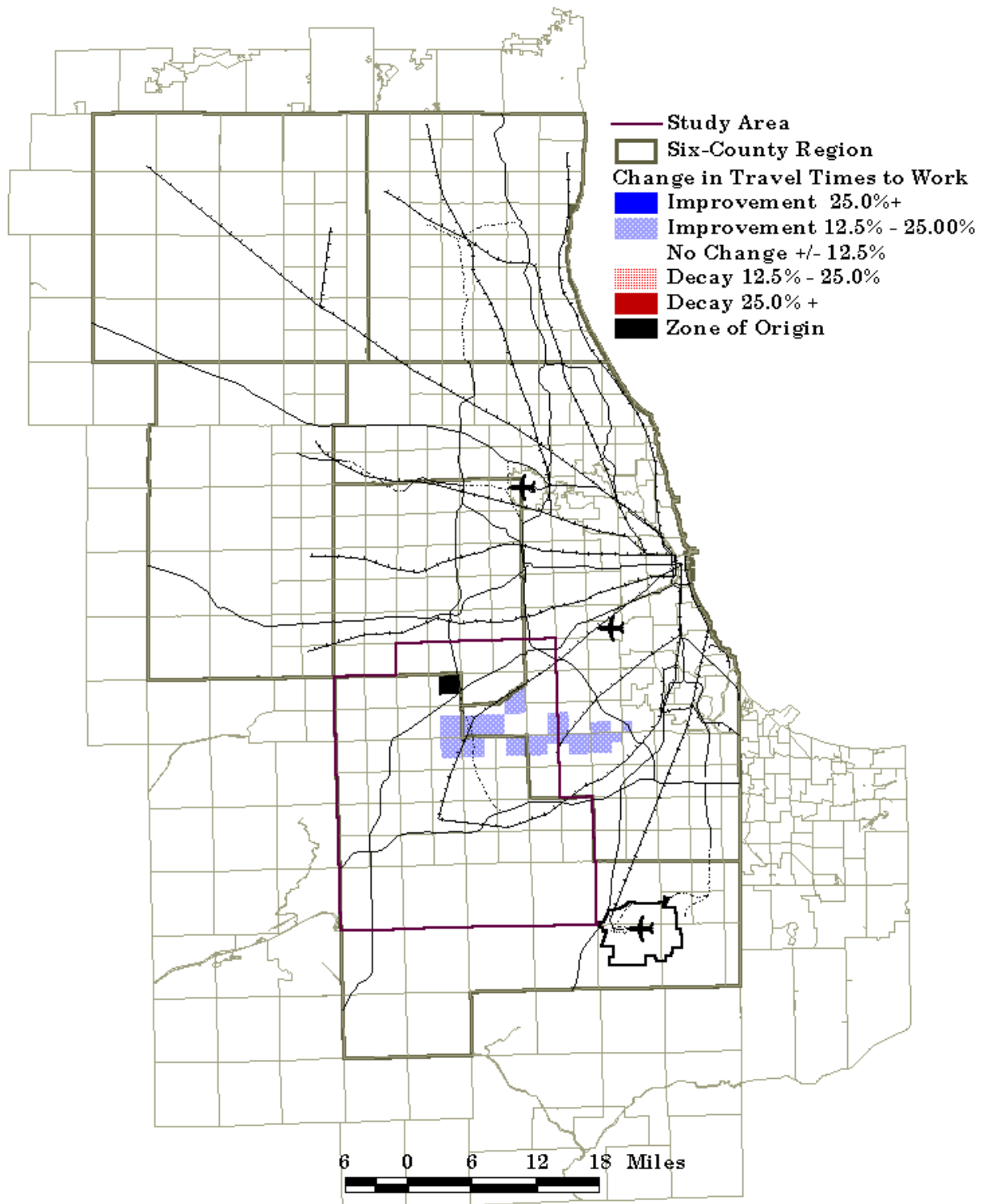
## **F. Conclusions**

Both the analysis of Work Trip Ends and the Changes in Travel Times to Work (am travel times), support the assumption that the I-355 Extension would improve accessibility to the job-rich areas of DuPage County and northward toward one of the

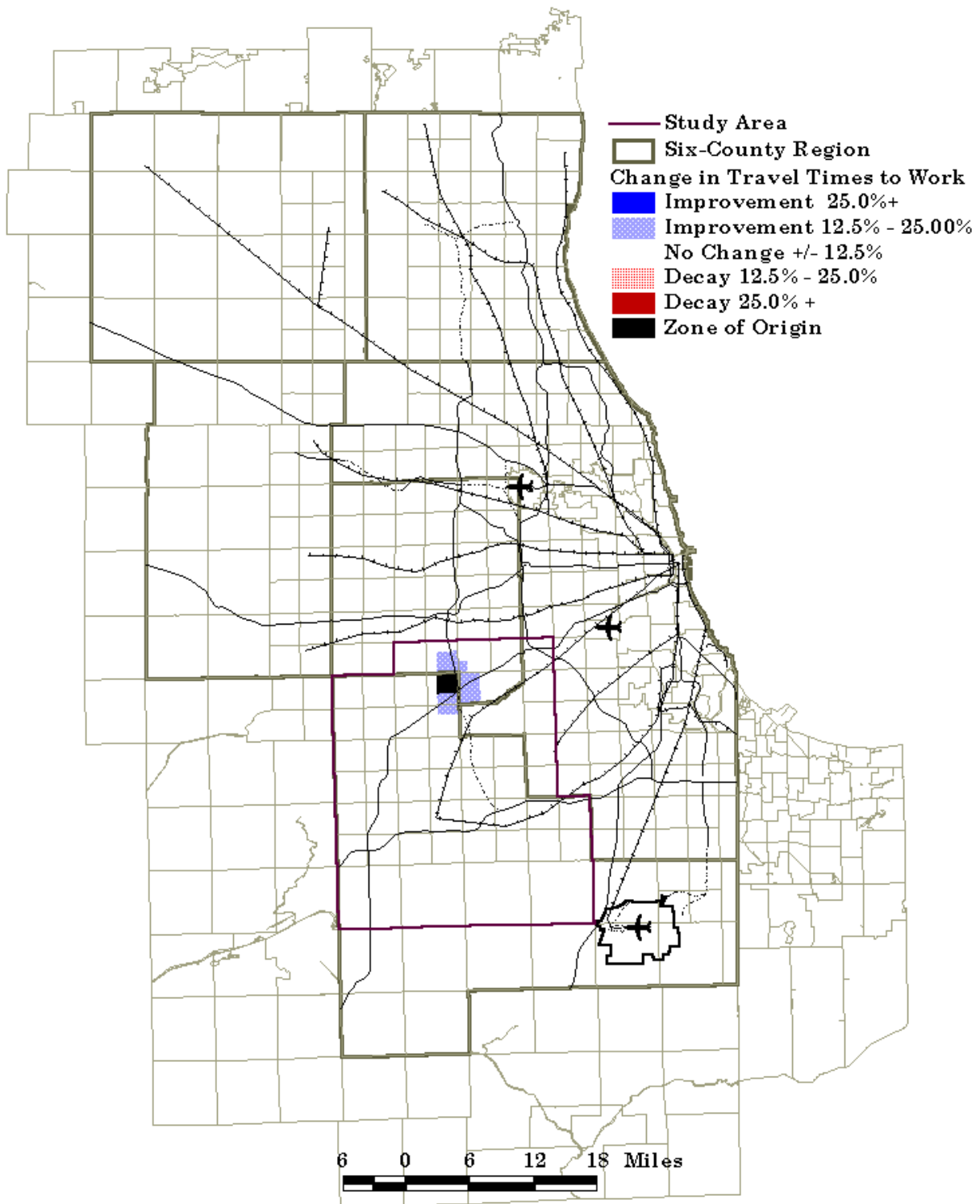
## Exhibit 39 : Changes in Travel Times to Work Full-Build Versus No-Build Scenarios - Zone 1566



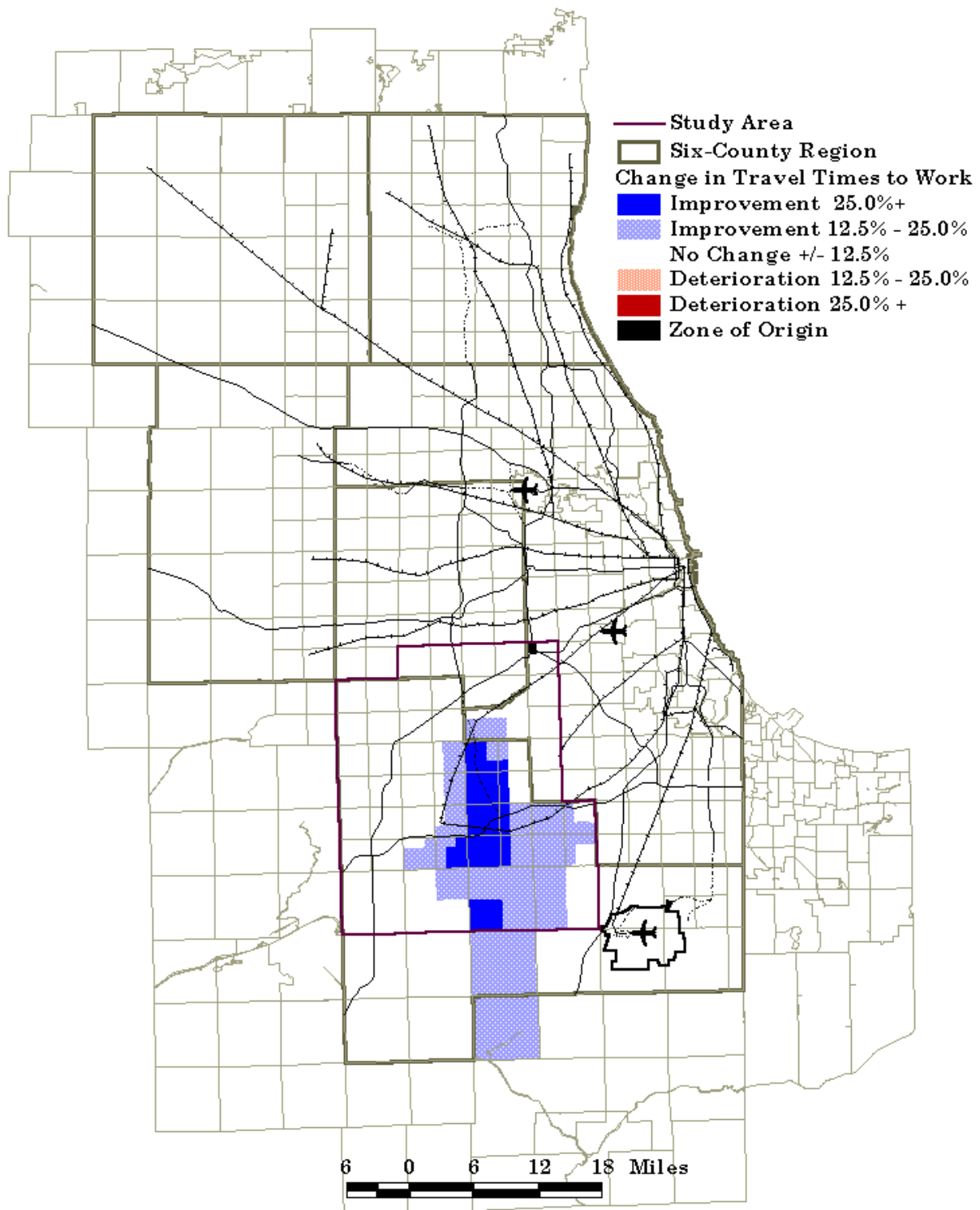
## Exhibit 40 : Changes in Travel Times to Work Arterial Enhancements Versus No-Build - Zone 1566



## Exhibit 41 : Changes in Travel Times to Work Lemont By Pass Versus No-Build - Zone 1566

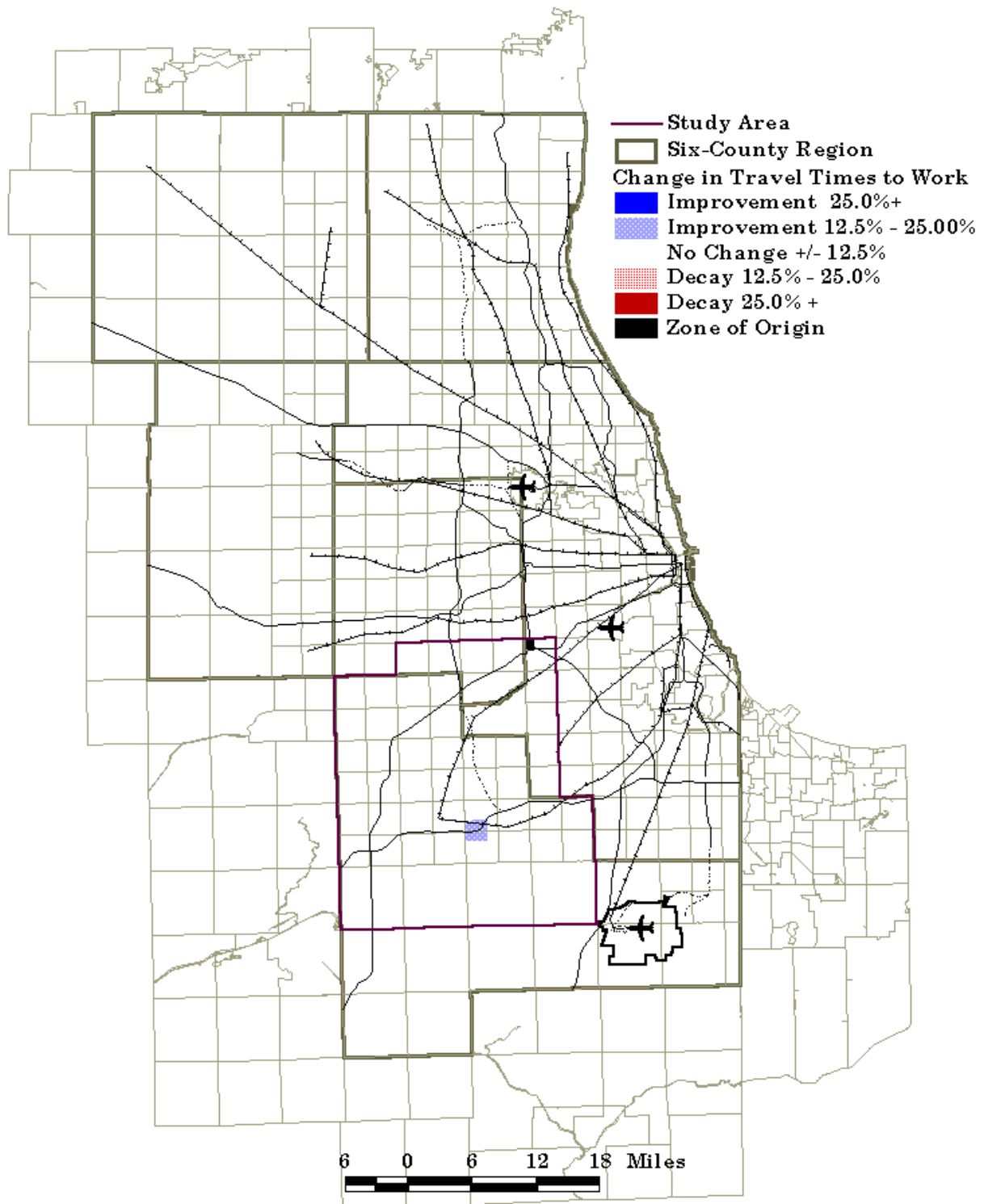


## Exhibit 42 : Changes in Travel Times to Work Full-Build Versus No-Build Scenarios - Zone 671

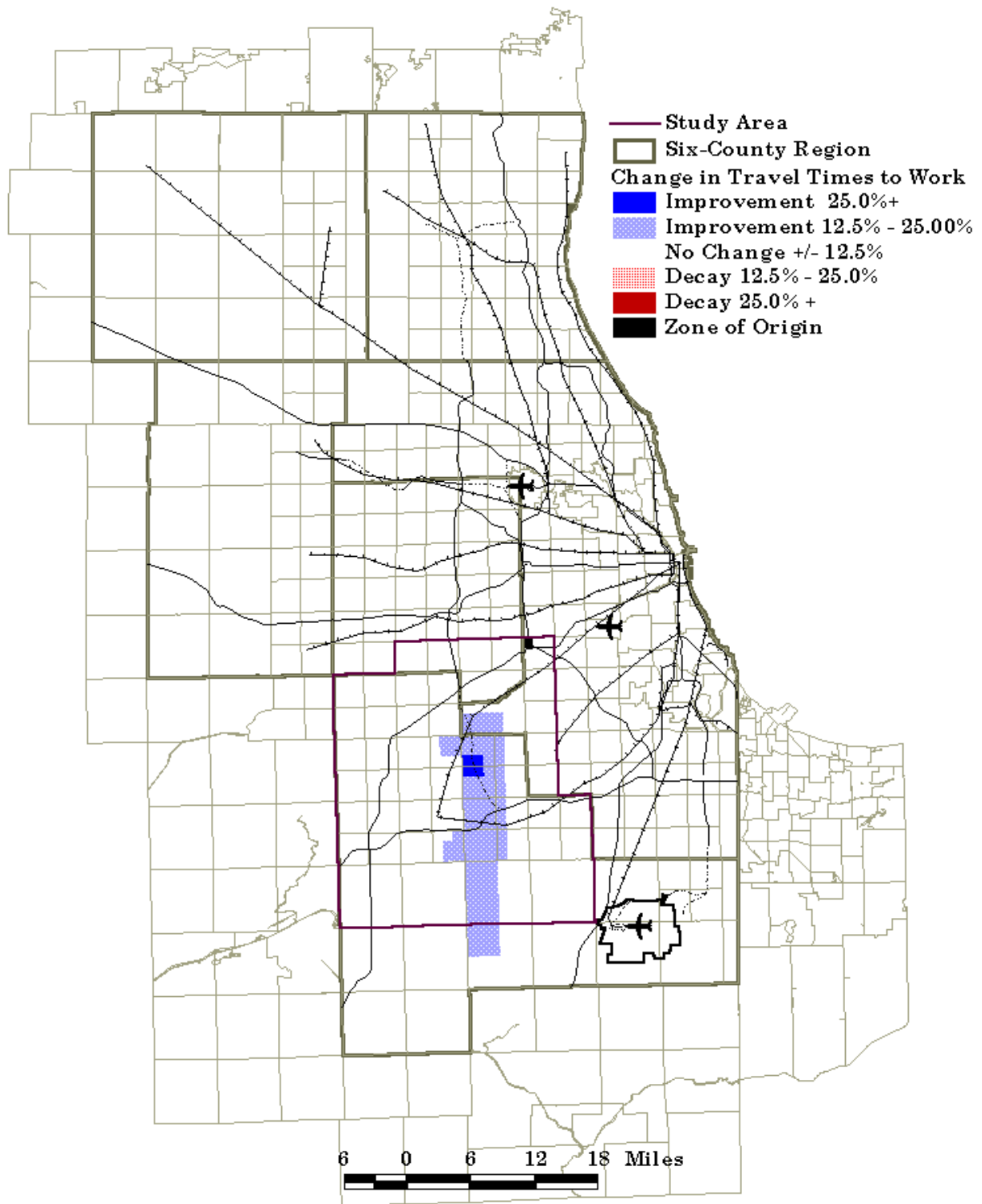




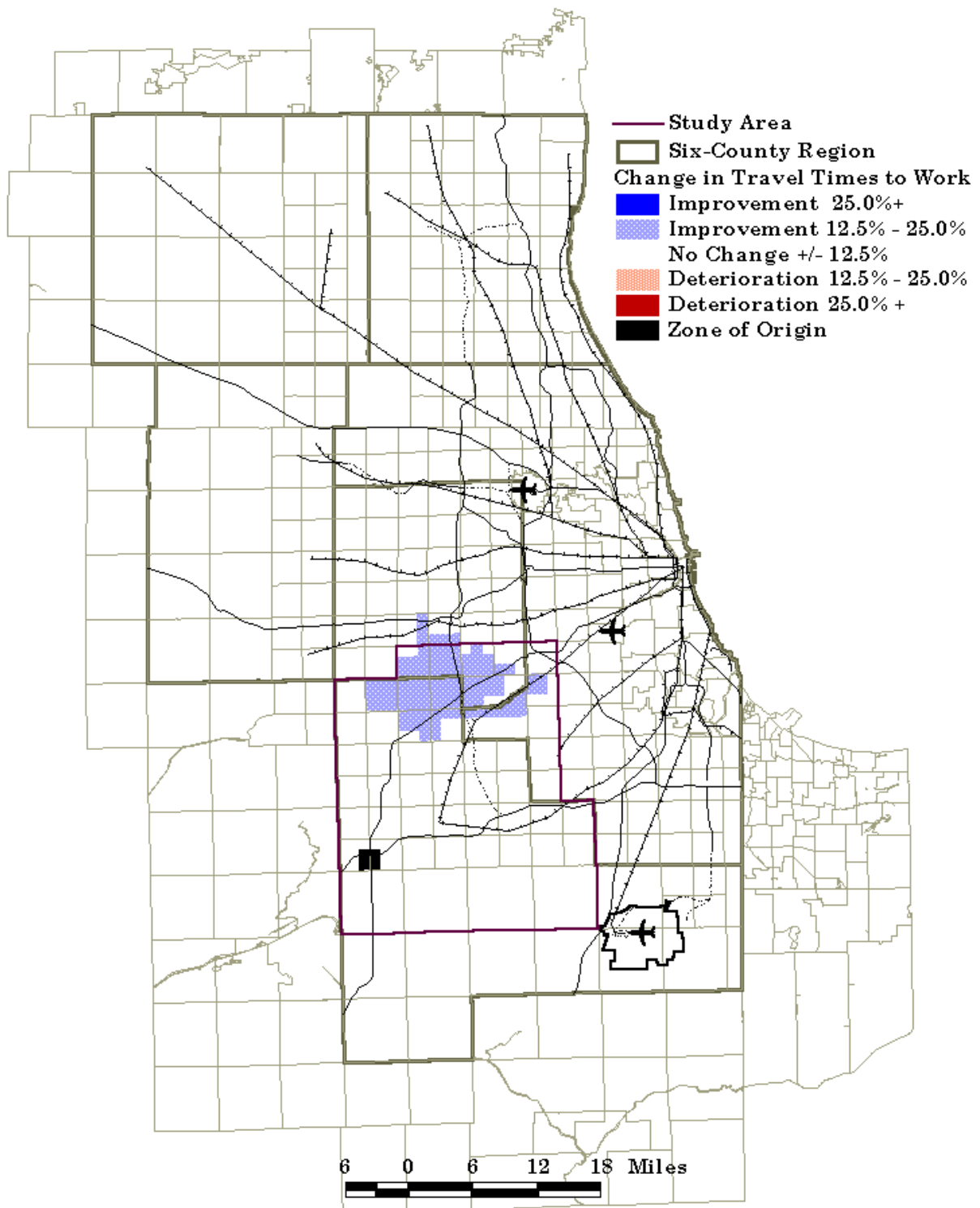
## Exhibit 43 : Changes in Travel Times to Work Arterial Enhancements Versus No-Build - Zone 671



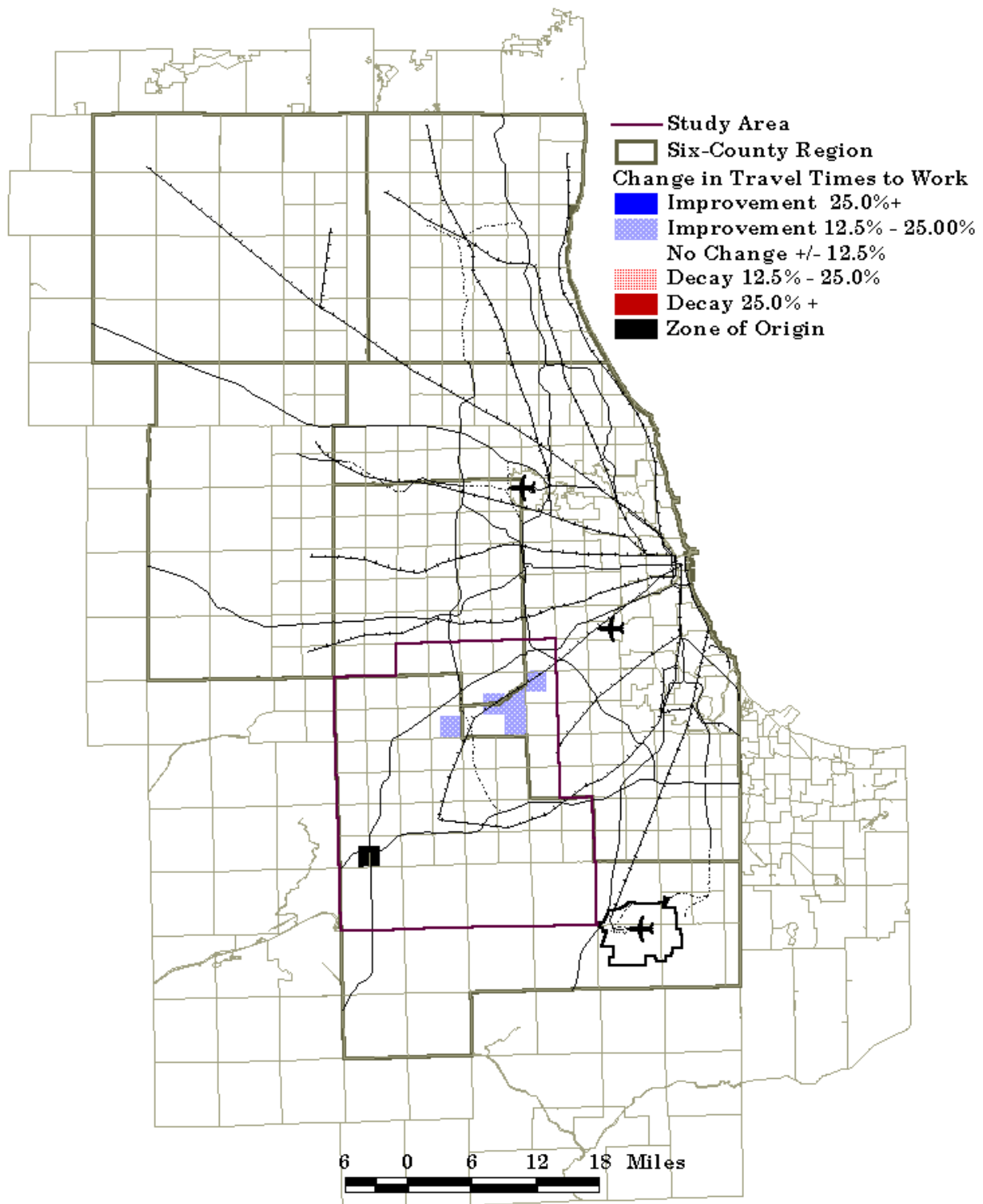
## Exhibit 44 : Changes in Travel Times to Work Lemont By Pass Versus No-Build - Zone 671



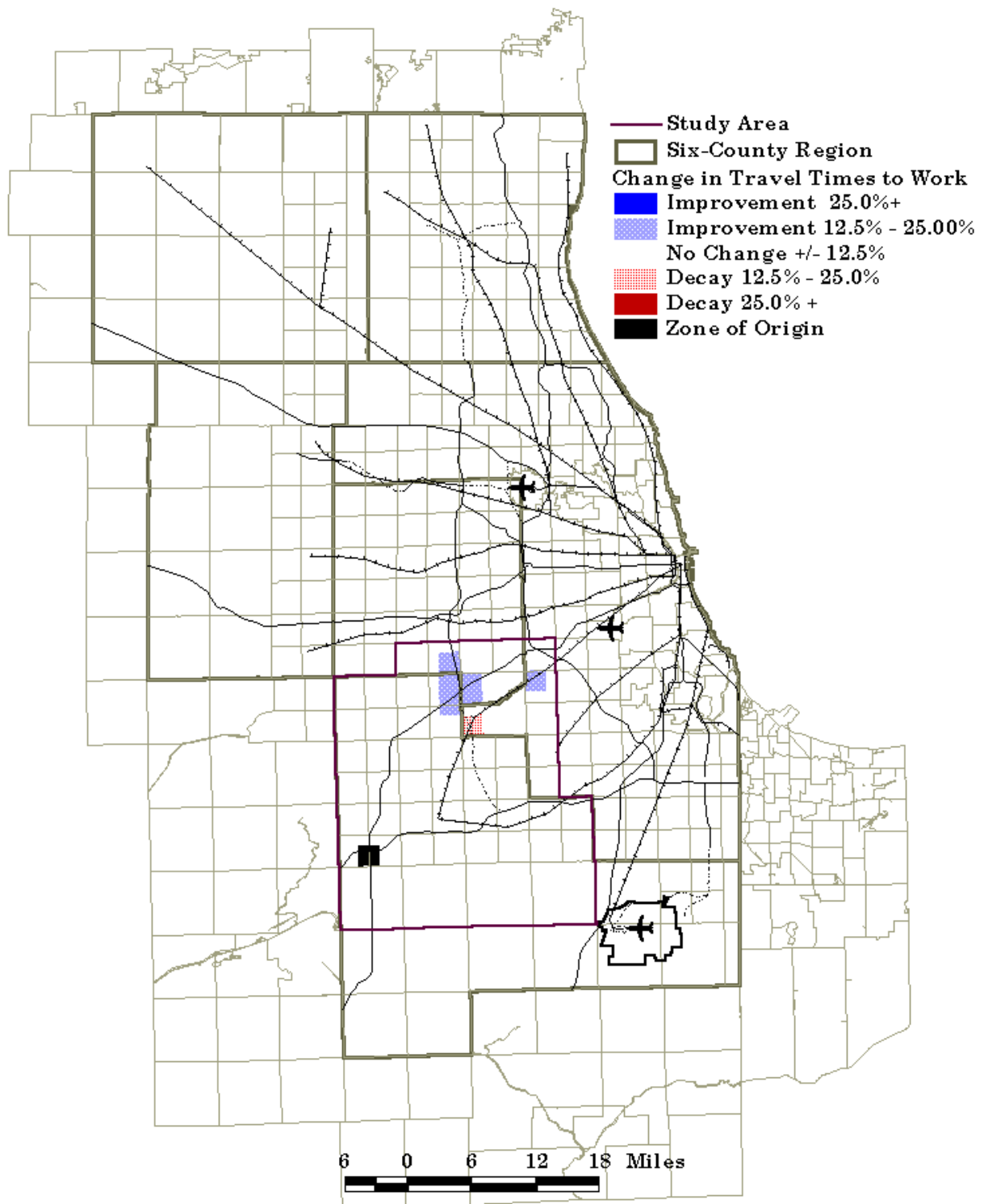
## Exhibit 45 : Changes in Travel Times to Work Full-Build Versus No-Build Scenarios - Zone 1642



## Exhibit 46 : Changes in Travel Times to Work Arterial Enhancements Versus No-Build - Zone 1642



## Exhibit 47 : Changes in Travel Times to Work Lemont By Pass Versus No-Build - Zone 1642



two major job magnets of the region, O'Hare.

The I-355 Extension concentrates trips to work from scattered, longer-distance trips, both outside the six-county region and inside the job-poor areas of South Cook and the South Side of Chicago, into southern DuPage and central Will Counties.

The I-355 Extension improves travel times to work for virtually all zones and rates far better, in all instances, than those of the arterial improvements; and better, in most instances, than the Lemont By-Pass.



## **Appendix**



# northeastern illinois planning commission

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Chicago Park District

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Appointed by the Board of the

Illinois Association of

Wastewater Agencies

A. E. Mochak

July 15, 1999

Ms Carla Berroyer  
Bureau Chief  
Urban Program Planning  
Illinois Department of Transportation  
2300 S. Dirksen Pkwy  
Springfield, IL 62764

URBAN PROG PLAN	INFO	NOTES	DATE	INITIAL
BUREAU CHIEF			7/21	
MANAGER				
ITS				
TRANSMITTING PLAN				
PLANNING				

Dear Ms Berroyer,

Over the past six months the staff of the Northeastern Illinois Planning Commission (NIPC), with the assistance of CATS, has run the DRAM/EMPAL model to test its sensitivity to variations in basic assumptions. Two of these model runs have focused on the extension of I-355 from I-55 to I-80. Both of these runs were based upon the existing airports assumption, since that is the assumption that the NIPC model operates under. The results of these two runs were forwarded to the al Chalabi Group (ACG) for use in its analysis of the I-355 extension study area. The NIPC staff has worked with the ACG to ensure that its analysis and refinements required of the study area are consistent with NIPC forecast analysis.

The Planning Committee of NIPC has reviewed the findings of the ACG regarding the I-355 extension and agrees that the analysis ACG used to determine the impacts is consistent with analysis used to produce the endorsed NIPC forecasts. The Committee further agrees that the range of results amongst the alternative forecasts used by the Illinois Department of Transportation for the supplemental environmental impact statement for the I-355 extension are logically explainable.

Sincerely,

*John A. Swanson*

John A. Swanson,  
Acting Executive Director

jmp

Post-It Fax Note

7871

Date 8/11/99	# of pages 1
To Margery	From Carla
Co Dept	Co.
Phone #	Phone #
Fax #	Fax #